REPORT

OF THE

FEDERAL ELECTRIC RAILWAYS COMMISSION

TO THE

PRESIDENT

AUGUST, 1920

WASHINGTON
GOVERNMENT PRINTING OFFICE
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The PRESIDENT OF THE UNITED STATES.

SIR: The Federal Electric Railways Commission begs leave to present the following report.

This Commission was appointed by you in response to a suggestion outlining the need of such a commission in the following letter from two members of your Cabinet, the Secretary of Commerce and the Secretary of Labor:

WASHINGTON, D. C., *May 15, 1919.*

DEAR MR. PRESIDENT: The electric-railway problem to which your attention has been called on several occasions has recently assumed such serious national proportions as to warrant the prompt attention of the Federal Government. Already 50 or more urban systems, representing a considerable percentage of the total electric-railway mileage of the country, are in the hands of receivers. The communities affected are among the most important—New York, Providence, Buffalo, New Orleans, Denver, St. Louis, Birmingham, Montgomery, Pittsburgh, Memphis, Fort Wayne, Des Moines, St. Paul, Spokane, Chattanooga.

Other large systems are on the verge of insolvency, for the industry as a whole is virtually bankrupt. The continued shrinkage in the value of hundreds of millions of electric-railway securities held by savings banks, national banks, life-insurance companies, and by the public at large threatens to embarrass the Nation's financial operations. Furthermore, the withdrawal of this industry's buying power, which is said to rank third in magnitude, involves the unsettlement of collateral industries, naturally entailing labor dislocation that will affect hundreds of thousands of employees.

The return to normal conditions is being hampered and the efforts of the Government to avert strained conditions in finance, labor, and commerce are being less fruitful of satisfactory results than should be expected, if some solution of the electric-railway problem were in view.

What the solution is may, we believe, be evolved by a thorough investigation of general franchise and operating conditions in their relation to rates, including service-at-cost plans, State and municipal taxation, local paving requirements, and internal economies that may be effected.

We therefore propose and recommend the appointment by you of a Federal board or commission, whose duty it shall be to study and report upon the entire problem, in order that the State and municipal authorities and others concerned may have the benefit of full information and of any conclusions or recommendations that may be formulated. Such a study will, in our opinion, exert a helpful and constructive force in this critical period of the industry's existence and will aid in the readjustment. If you would make such an appointment before June 30 your contingency fund could be used to defray the expenses, which would be about $10,000.

The National Association of State Commissioners has always invited Federal aid in this matter and the recent conference of governors and mayors adopted a resolution recommending Federal consideration of the problem of preventing the financial disaster threatening this industry.

We propose that such a commission shall be made up of one representative of each of the following groups: Treasury Department or War Finance Corporation, Department of Commerce, Department of Labor, National Association of State Commissioners, American Cities League of Mayors, Amalgamated Association of Street and Electric Railway Employees, American Electric Railway Association, Investment Bankers' Association of America.

We respectfully urge your authorization for such a commission, to be followed by your formal proclamation upon the selection of the personnel.

Cordially, yours,

WILLIAM C. REDFIELD,
Secretary of Commerce.
W. B. WILSON,
Secretary of Labor.

The Commission appointed by you on the 31st day of May, 1919, consisted of the following members, who were to serve and have served thereon without compensation:

Charles E. Elmquist, president and general solicitor of the National Association of Railway and Utilities Commissioners.

Edwin F. Sweet, Assistant Secretary of Commerce, representing the Department of Commerce.

Philip H. Gadsden, representing the American Electric Railway Association.

Royal Meeker, Commissioner of Labor Statistics, Department of Labor, representing that department.

Louis B. Wehle, General Counsel of the War Finance Corporation, representing the Treasury Department.

Charles W. Beall, of Harris, Forbes & Co., New York, bankers, representing the Investment Bankers' Association of America.

William D. Mahon, president of Amalgamated Association of Street and Electric Railway Employees of America, representing that association.

George L. Baker, mayor of Portland, Oreg., representing the American Cities League of Mayors.

The Commission met on June 4, 1919, in Washington, D. C., and organized by electing Charles E. Elmquist as chairman and Edwin F. Sweet as vice chairman, and subsequently appointed Charlton Ogburn as its executive secretary. At its first meeting the Commission announced that it would attempt to determine the general principles which should govern the regulation, operation, and service of electric railways, but that the Commission was without authority to hear and determine specific local controversies, and that it would not undertake in any way to encroach upon the functions of State commissions or of municipal authorities; that the purpose of the Commission was rather to investigate and study the condition of the electric railway industry, including franchises, rates, taxation, and assessments, economies of operation, public relations, regulation, etc.

The Commission gathered its testimony mainly in two ways: First, by public hearings, at which 95 witnesses testified in person and 21 others sent prepared statements; second, by a series of questionnaires sent to every city in which there is a street or interurban railway, addressed to the electric railways, the mayors, chambers of commerce, and the central labor unions, and also to all of the State public utility commissions.

The first public hearing was held in New York on June 19, 1919. The next hearing was held in Washington on July 15, lasting two weeks, during which time the witnesses on behalf of the electric railways presented evidence under the direction of the committee of one hundred of the American Electric Railway Association. The next hearing was in Washington beginning August 11, and lasted one week, testimony being offered on behalf of the public, chiefly by representatives of the municipalities and all State public utility commissions. At the last hearing held in Washington, beginning September 29, and lasting one week, testimony was offered by further witnesses representing the public and by witnesses on behalf of labor, represented by the Amalgamated Association of Street and Electric Railway Employees of America. All of these hearings ran

through day and night sessions, beginning at 10 a. m. and usually continuing until 10 or 11 p. m., and totaling one month.

Among the witnesses were ex-President William H. Taft, Secretary of War Newton D. Baker, leading bankers, railway managers, economists, mayors, public utility experts, and State public utility commissioners.

The testimony taken embraces 6,195 pages of typewritten transcript.

Three separate questionnaires were later sent out. The first was general, dealing with all phases of the situation. The last two were special, seeking traffic figures, month by month, for the past three years—that is, as to the number of revenue passengers, amount of passenger revenue, fare charges, and any occurrences affecting traffic, such as strikes, influenza epidemic, and the like.

At the conclusion of the final public hearing the Commission engaged the services of Dr. Delos F. Wilcox to aid in analyzing the testimony gathered and to make suggestions to the Commission with reference to its report. Dr. Wilcox made a very comprehensive analysis of the evidence, containing 823 pages of matter. The Commission regrets that it can not publish this analysis with the proceedings, since it represents a complete and masterful study of the whole electric railway problem. Printed with the evidence, however, is a summary of the Wilcox report, prepared by him. The answers to the questionnaires resulted in bringing to the attention of the Commission a great mass of information. All the evidence, exhibits, analysis of Dr. Wilcox, and tabulated summaries of information found in the answers to the questionnaires have been considered by this Commission.

The final meeting of the Commission was held in Washington July 22 to 27, 1920, inclusive, for the purpose of formulating this report.

Owing to the divergent representation of its personnel, this unanimous report of the Commission necessarily represents decided concessions by some of its individual members.

A complete report of the testimony will be printed, together with this report, and will be placed in the Congressional Library in Washington and other leading libraries in the country, with all regulatory commissions, and with the mayors of the leading cities of the United States.

For convenience, we wish, before proceeding to our discussion, to state our principal conclusions and recommendations, which are as follows:

SECTION I.

CONCLUSIONS AND RECOMMENDATIONS.

I. The electric railway furnishing transportation upon rails is an essential public utility and should have the sympathetic understanding and cooperation of the public if it is to continue to perform a useful public service.

II. The electric railway has been and will continue to be a public utility, subject to public control as to the extent and character of the service it renders and as to the rates it charges for such service.

III. It is of the highest importance that both the total cost of the service and the cost to the individuals who use it shall be kept as low as possible without injustice to those who take part in producing it.

IV. The electric railway industry as it now exists is without financial credit and is not properly performing its public function.

V. This condition is the result of early financial mismanagement and economic causes accentuated by existing high-price levels of labor and materials, and of the failure of the uniform unit fare of 5 cents prescribed either by statute or by local franchise ordinances or contracts to provide the necessary revenues to pay operating costs and to maintain the property upon a reasonable basis.

VI. The industry can be restored to a normal basis only by the introduction of economies in operation, improving the tracks, equipment, and service, and assuring a reasonable return upon the fair value of its property used in the public service when honestly and efficiently managed.

VII. The electric railways must expand to meet the growing needs of their communities; therefore, the first essential is to restore credit in order to obtain necessary new capital for the extension and improvement of service.

VIII. Restoration of credit involves a readjustment of relations which will remove public antagonism, provide public cooperation, and insure to the investor the integrity of his investment and a fair rate of return thereon.

IX. Effective public cooperation should be exercised by eliminating, in so far as it is practicable, special assessments for sprinkling, paving, and for the construction and maintenance of bridges which are used by the public for highway purposes.

X. Extensions into new territory resulting in special benefits to the property in that vicinity should be paid for by assessments on such property in proportion to the benefits received, and the amount of such assessment should not be added to the physical value of the corporate property.

XI. The great increase in the use of private automobiles, the jitney, and motor busses has introduced a serious although not a fatal, competition to the electric railway. These forms of public motor conveyance when operated as public carriers should properly be subject to equivalent regulatory provisions.

XII. The full cooperation of labor is essential to the highest prosperity and the usefulness of the industry. The employees engaged in this occupation should have a living wage and humane hours of labor and working conditions. They should have the right to deal collectively with their employers, through committees or representatives of their own selection. All labor disputes should be settled voluntarily or by arbitration, and the award of such a board should be final and binding upon both parties. It is intolerable that the transportation service of a city should be subject to occasional paralysis, whether by strikes or by lockouts.

XIII. A private industry should not be subsidized by public funds unless it is imperatively necessary for the preservation of an essential service, and then only as an emergency measure.

XIV. Unless the usefulness of the electric railways is to be sacrificed public control must be flexible enough to enable them to secure

sufficient revenues to pay the entire cost of the service rendered, including the necessary cost of both capital and labor.

XV. There can be no satisfactory solution of the electric-railway problem which does not include the fair valuation of the property employed in the public service, and where that is done the companies should voluntarily reduce any excessive capitalization to the basis of such value.

XVI. There is no insuperable objection to a large, wide-open city having exclusive jurisdiction over the rates and services of public utilities.

XVII. The necessity for scientific and successful regulation of systems, whether large or small, and especially those which operate through several cities and villages and in rural territory, leads to the conclusion that local regulation should generally be subject to the superior authority of the State, whether as a matter of original jurisdiction or through the medium of appeal.

XVIII. Cost-of-service contracts are in the experimental stage, but where tried they seem to have secured a fair return upon capital, established credit, and effected reasonably satisfactory public service. Such contracts may safely be entered into where the public right eventually to acquire the property is safeguarded.

XIX. The right of the public to own and operate public utilities should be recognized, and legal obstacles in the way of its exercise should be removed.

XX. While eventually it might become expedient for the public to own and operate electric railways, there is nothing in the experience thus far obtained in this country that will justify the assertion that it will result in better or cheaper service than privately operated utilities could afford if properly regulated.

XXI. Public ownership and operation of local transportation systems, whether or not it be considered ultimately desirable, is now, because of constitutional and statutory prohibitions, financial and legal obstacles, the present degree of responsibility of our local governments, and the state of public opinion, practicable in so few instances, that private ownership and operation must as a general rule be continued for an extended period.

XXII. If the reforms incident to public regulation which we suggest in this report should not result in making private ownership satisfactory to the public, such reforms should at least enable public ownership to be established upon a just and equitable basis.

SECTION II.

THE STREET RAILWAY IS AN ESSENTIAL INDUSTRY.

The electric railway industry at present is a factor of essential importance in the urban life and, to a scarcely less extent, in interurban relations of the country.

The experience of 75 years, the unanimous opinion of expert witnesses, and of those who are students of transportation problems, and the assumption of the necessity for tracks by inventors working to improve the methods of street transportation alike demonstrate the fundamental and permanently essential nature of the railway—and to the present time of the electric railway—as the most nearly ade-

quate, reliable, and satisfactory system available for transporting the maximum number of people through the streets of our cities with the least interference with the use of these streets for other purposes of public ways.

The Bureau of Census Reports for the year 1917 show the net capitalization as of December 31, 1917, to be $4,869,962,096, which makes this industry one-fourth as important as the steam railroads of the country in point of capitalization. The total mileage in 1917 was 44,835. The net capitalization per mile of track is $109,065. The total revenue for 1917 from railway operations was approximately $650,000,000. These statistics do not include the electrified portions of steam railroads engaged in suburban service. Approximately 40 per cent of the mileage is suburban in character.

The number of people with whom the electric railways come into daily contact is shown by the fact that in the year 1917 they carried a total of 11,304,660,462 revenue passengers and 3,202,254,111 transfer and free passengers, as compared with a total of 1,066,638,474 revenue passengers carried by the steam roads.

In spite of the immense development of the automobile industry the demand for electric railway transportation has increased at a rapid rate. It is estimated that on December 31, 1917, there were 4,643,481 passenger automobiles and that two-thirds of the development of that industry was subsequent to 1912, but the number of revenue passengers carried by the electric railways was approximately 1,800,000,000 more in 1917 than in 1912. During the year ended June 30, 1919, the total number of revenue passengers carried by the local transportation lines of New York City was 2,079,942,604, as compared with 1,402,417,642 carried during the year ended June 30, 1909, an increase of more than 46 per cent in 10 years. On the basis of the estimated population served the number of revenue rides per capita in New York City in 1909 was 304 and in 1919, 370—an increase of nearly 22 per cent in the riding habit.

In this connection Mr. Henry G. Bradlee, president of the Stone & Webster Corporation, stated in a letter dated October 1, 1919, as follows:

> It would appear that something has been and is still stimulating the street railway business; possibly the automobiles themselves have helped in this direction. People may be acquiring to a greater extent than ever before the riding habit and may be more and more inclined to move about and spend less time in their own home or with their own neighbors. The moving picture is probably also a factor in the situation, but whatever may be the cause, the facts seem pretty clear that the demand for transportation service is still growing apace. This fact, I think, is generally not understood; in fact, I am free to confess that we ourselves were surprised to see the extent of the increased demand for service.

In 1917 the number of employees was 294,826, and it is estimated that the total number of people who were directly and conveniently accessible to electric railway service is about 80,000,000 at the present time. The electric railways have overflowed municipal boundaries and now include a network of interurban lines in many portions of the country, but the fact still remains that the industry is primarily a street railway with its principal function the transportation of passengers within the limits of municipalities.

While the electric railway industry is essentially local, it has certain national characteristics. Its difficulties can not be regarded simply as the isolated problem of a local system repeated hundreds

of times all over the country in varied forms and degrees, each problem being independent of all the others. On the contrary, although a local traction system may be separated by hundreds of miles from its nearest neighbor, it is in other ways inseparably connected with all of the others. As a purchaser in the equipment markets of other States it competes with other companies. Its demands for labor and its scales of wages are necessarily felt at once by traction systems everywhere. In procuring its capital its officers have been generally compelled to market its securities to a large extent in other States, among investors who are particularly interested in such classes of investment. The close industrial and financial interdependence of the hundreds of physically unrelated local traction systems, the millions of dollars of capital placed by thousands of investors in plants which manufacture electric traction equipment, and the five billions of electric traction bonds and stocks to be found scattered all over the country in banks, insurance company reserves, and in private investment, translate the many local problems into a national problem.

SECTION III.

FINANCIAL CONDITION OF THE ELECTRIC RAILWAY INDUSTRY.

The investigation demonstrates that the financial condition of the electric railway industry is acute, and that to a very great extent it is not properly performing its public functions.

The record in this case shows that on May 31, 1919, there were 62 companies, having a mileage of 5,912, in receivership, that 69 companies had dismantled and junked altogether 534 miles of railway, and that 38 companies together had abandoned 257 miles of track. Since that date and up to July 1, 1920, there have been 56 additional companies, having a mileage of 1,908, which have been thrown into receivership.

The capitalization of the industry, according to the 1917 census report, is represented by $3,058,377,167 in bonds and $2,473,846,651 of stock. For the year 1917 the net income of operating companies was $56,450,930, representing an average rate of return of 2.81 per cent upon the capital stock. In 1918 the evidence shows the net income was reduced to $20,183,413, which represents a return of only 1 per cent. As a whole, there has been some improvement in the industry since the commencement of these hearings, due to the fact that there has been an increase in the car-riding habit since demobilization, and in a great many instances the fare has been increased beyond 5 cents. In spite of this slight improvement, however, the condition of the industry at the present time is serious. A great many companies are unable properly to maintain their track and equipment and to perform efficient public service, to secure funds with which to purchase new equipment, to build necessary improvements and extensions, or to refund maturing obligations.

A large number of factors have contributed to the present plight of the electric railway industry. These may be mentioned:

(*a*) They were not conservatively financed in their early years, and have not since made good their overcapitalization, except to a limited extent, otherwise than through the process of bankruptcy and reorganization. In the early days the promoters of electric-

railway properties believed that long-term franchises with a 5-cent fare would be permanently profitable. Large sums of money were required to develop the business. In many cases the promoters issued bonus stock to represent their hopes and expectations. This bonus stock did not represent money, service, or property, and added nothing to the value of the plant. As a result of this practice, there are many cases where the existing capitalization exceeds the investment in the plant or the value thereof.

(*b*) Neglect to amortize this excess capitalization.

(*c*) Failure to amortize the normal accrued depreciation.

(*d*) Payment of unearned dividends and neglect of ordinary maintenance.

(*e*) Overbuilding into unprofitable territory or to promote real-estate enterprises, involved sometimes with political improprieties.

(*f*) A uniform 5-cent fare, which established a constant rate to apply during variable cost periods. This contract fare has been a source of irritation, resulting in litigation. During normal times many communities sought to have the fare reduced below the contract price. The companies insisted upon adhering to the contract, and they were sustained by the courts. During the recent high-cost period many companies have applied for an increase in fare to enable them to meet operating expenses and fixed charges. In many cases communities undertook to prevent the increase beyond the contract rate. Under the decisions of the Supreme Court of the United States and of the highest courts of a number of States, it is now established that a franchise provision naming a certain rate of fare creates no vested right of any car rider but that such fare can be properly changed by appropriate legislation and substituted by a higher charge.

As indicative of the fact that the 5-cent fare has not been adequate during the war period, we need only to call attention to the fact that on July 1, 1920, increased fares have been allowed in over 500 selected cities; 10-cent fares have been allowed in 69; 9-cent fares in two cities; 8-cent in 30 cities; 7-cent with 1-cent charge for transfers in 26 cities; 7-cent zones in 6 cities; 7-cent in 145 cities; 6-cent zones, with 2-cent transfer charge, in 10 cities; 6-cent for two zones, with 2-cent per zone thereafter, in 13 cities; 6 cents for each two zones in 4 cities; 6 cents cash fare in some cases in 149 cities; 5-cent zones and elimination of reduced rate ticket in 50 cities.

Boston has a 10-cent fare. Chicago, Washington, Cincinnati, Kansas City, Youngstown, and other large cities are on an 8-cent basis.

It would seem that so long as the railways depend upon earning power, and earning power depends upon passenger revenue, the fixed uniform fare is a broken reed for the industry or for the community to lean upon. Perhaps the general sentiment of the electric railways is best expressed by the evidence of Gen. Guy Tripp before this Commission, as follows:

> We were all living in a fool's paradise in the street railway business when we suddenly woke up—when the war woke us up—to find that no business which can not increase its revenues under any conditions can live or is sound.

Conversely, it may be said that no community should bind itself by contract or otherwise to continue, after normal conditions have been restored, a rate which might be found reasonable during this abnormal period.

(*g*) Limited franchises which impair credit and toward the expiration of the franchise result in neglect of the maintenance of the property.

(*h*) Special taxation and franchise obligations, having particular reference to street paving, street sprinkling, construction and maintenance of bridges used by the general public, general taxation, etc.

The American Electric Railway Association introduced a chart which showed that the total amount of taxes levied against the properties in 1917 amounted to $45,756,695, of which taxes on real and personal property was $21,804,619, and on earnings, capital, and other taxes $23,952,076, representing 10.11 per cent of the operating expenses. In 1902 the ratio of taxes to operating expenses was 9.19 per cent. It is thus seen that there is only a small increase in the ratio of expense for this item since last year.

For the period from 1913 to 1918 the expenditures for all taxes, including paving and other imposts, has ranged from $60,000,000 to $65,000,000, corresponding to 10 per cent of the operating revenues. The ratio varies very materially among the different plants.

The evidence on behalf of the companies therefore shows that on the basis of the 5-cent fare the taxes represent about one-half of a cent in the nickel which the car rider has been paying, and that they thus contribute materially to the necessity for fare increases. The argument has been made with considerable force that the car rider should not be required to pay for supporting the city's schools, its almshouses and other city institutions. It is contended that the company should be required to pay in taxes to the city only such an amount as would reimburse the city for its actual cost due to the presence of the street railway; and that such a plan of taxation alone would be consistent with the idea that the car fare should be based upon the real cost of rendering the actual service of transportation.

Although there is much force in this idea, and it should be borne in mind by all who are interested in street railway problems, we do not think the time is ripe for recommending its general adoption. The heavy taxation to which the companies are now subject came into being during the period of their prosperity and at a time when they were still essentially private concerns, relatively free from regulation. It was natural that their properties should be taxed in no less degree than the properties of other private corporations.

When a company comes to subject itself to such a comprehensive regulation as renders its property in effect a public instrumentality, then tax exemption begins to be in order. This course has indeed been followed in Cleveland, where as an incident to the passing of the properties under the Tayler plan of municipal regulation they came to be exempted in large measure from taxation. To the extent that it may become possible in any community under similar conditions to exempt street railway property from taxation, the rider's car fare will come more nearly to represent the actual cost of rendering the service of transportation—in itself a desirable result. But it would seem that the status of the company as a public agency should be well assured before such exemption should be attempted.

(*i*) *Automobile and jitney competition.*—For several years prior to the war, and to an increasing extent throughout the war period and up to the present time, the automobile has proven to be a serious competitor of the electric railways rendering local transportation service. Jitneys and automobile buses operating as common carriers have been able in some cases, through the absence of sufficient public regulation, to engage in unfair and destructive competition with the electric railways for the most profitable part of urban passenger traffic. Strong as this competition has been, however, the electric railway industry as a whole has shown a very substantial increase in the riding habit. The operation of jitney buses as common carriers is much more restricted than the operation of private automobiles, but the jitneys have had a definite and intensive effect upon the street railway situation in particular communities, for the reason that they have engaged in direct and in some respects destructive competition with the street cars as public carriers. The experience of numerous communities, even before the extraordinary conditions growing out of the war, made it clear that unrestricted jitney operation, though more or less temporary and precarious in character, threatens the service, credit and solvency of the street railways.

(*j*) *Holding companies and banker control.*—About 75 per cent of the public utilities of the country are held, in whole or in part, by so-called "holding companies," which are responsible for their operation. This financing is done in large part through the securities of the parent company, which securities are supported by the securities of the various operating companies. This frequently gives an element of strength to the securities of the parent company which a single localized operating company could not in all cases present. If it were not for the supporting strength of these parent companies, many of the individual operating companies would have gone under before January 1, 1918.

Through these holding companies the electric railways threaten to become a banker-controlled industry. Those who have the ultimate say in matters of street railway policy from the point of view of investors have been dependent for their profits and their power upon the volume of securities outstanding and the frequency with which these securities have been exchanged or refunded. Holding companies in many instances have been responsible for overcapitalization and have insisted upon drawing from the underlying companies every possible cent that could be secured in order to make a showing on these inflated securities. Hon. Joseph B. Eastman, at present a member of the Interstate Commerce Commission, discussed the question as follows:

> In the third place a factor of weakness, I think, was the control of the companies in many instances by holding companies organized in the form of voluntary associations, or, to use a more technical term, express trusts. Although the stock and bonds of the street railway companies themselves were issued under public supervision, these voluntary associations which corralled all their stock were subject to no regulation whatever and issued shares upon an inflated basis, and that had the result of accentuating the desire to draw every possible drop of income out of the underlying companies that could be secured in order to support earnings upon the inflated shares of these voluntary associations.

Through this system of financing and management the utilities have been largely controlled by persons living distant from the

community affected by a particular electric railway, whose prime consideration has been to secure a return upon the property. This "absentee" management and control has not been successful in bringing about the proper spirit of cooperation between the local managers, employees, and the public. Since the electric railway companies come into immediate daily contact with large numbers of people, it is of the utmost importance that the industry should gain and hold the respect, confidence, and good will of its patrons. If the local public should invest its money in the stock and bonds of its local utilities there would be an improvement in the relations now existing between the corporation and the public.

(*k*) *Use of regulatory power to compel more and better service.*—Through the exercise of this power the companies have been required in many instances to improve their standards of service and equipment; to equip cars with vestibules for the protection of the motormen; and to give better heating, lighting, and ventilation for the comfort and convenience of the passengers. They have also been obliged to install safety devices and make stops at frequent intervals. The exercise of the regulatory power of States and municipalities has undoubtedly added to the cost of the service.

(*l*) *Underlying companies and leased lines.*—Consolidations have been brought about through the unification of a number of separate corporations which owned and maintained lines of track within the same city. In many cases consolidations were made upon the condition that these companies should be guaranteed a certain rate of return or fixed sum, which represented a high percentage yield upon the investment. The returns thus secured have been a frequent source of irritation, induced by a feeling that these underlying companies are being paid more than a reasonable return upon the value of their property. Your Commission believes that excessive payments to the underlying companies by the operating company have greatly diminished the net operating revenue, and that there can be no satisfactory solution of the street railway problem in such communities until the system has been valued as a whole, and the accounts so kept that the public may know that the rate of fare paid yields no more than fair return upon the value of such property.

(*m*) *Increasing demands of labor.*—The wages of street-railway labor prior to the war were generally insufficient from the viewpoint of a living wage, and the increases in wages that have taken place since the beginning of the war period have not on the average been as great as the increase in the cost of living.

At the time of our entry into the war, the average wages of motormen and conductors for companies of 100 miles and over were approximately 31.5 cents per hour. Since the war there has been a rapid increase in the wages of employees. The National War Labor Board by its awards in the year 1916 established the normal wages for this class of service in different cities, varying from 38 to 48 cents per hour, increasing wages 23½ per cent. The awards of the board mark the beginning of the rapidly increasing wages in this class of employment. An exhibit filed by the Amalgamated Association of Street and Electric Railway Employees of America shows the wages for conductors in the principal cities of the United States and Canada as of January 1, 1920. For convenience the exhibit is published as an exhibit attached to this report.

Since that date, new contracts have been agreed to which substantially increase the wages in a number of cities.

(n) *The war and the dollar.*—The conditions which have been here enumerated tended to break down the credit and stability of the electric-railway industry. The increases in prices of labor and materials entering into the construction, maintenance, and operation of electric railways during the war period have corresponded with the increases in the prices of general commodities and in the wages of labor in all industries. Operating costs became so high that in many cases the revenues were not sufficient to pay even the current expenses of operation. Material and equipment prices reached abnormal heights. The increase over 1915 in railway motors and car equipment show 87 per cent; locomotives, 87 per cent; rotary converters, 75 per cent; transformers, 70 per cent; switchboards, 100 per cent; motor generator sets 95 per cent; turbines, 100 per cent; pig iron, 106 per cent; steel plates, 141 per cent; copper, 58 per cent; steel castings, 220 per cent; coke, 35 per cent; coal, approximately, 100 per cent; asbestos material (which is largely used), 560 per cent; other insulating materials, 125 per cent; magnetic sheet steel, 280 per cent; labor from 85 per cent to 90 per cent.

(o) *Cost of new money.*—The destruction of capital incident to the World War and the unprecedented demand of the Government and industries for money, resulted in largely increasing the interest rate for loans. More attractive loans are now absorbing money available for investment, leaving the electric railways where, even with credit restored, they would have to compete in the money market with prosperous and unregulated enterprises.

These factors, and more particularly the increase in wages, fuel, material, and supplies, during and since the war period, have brought the electric railway industry to the point where in many instances it may be forced to abandon public service, and, in most cases, to a point where it will be unable to secure new capital to enable it to refund maturing obligations, secure new equipment, and to make necessary extensions and improvements unless some solution of the situation can be found.

Section IV.

EMERGENCY RELIEF.

The evidence in this case shows that the State regulating commission and in a large number of cases the local tribunals have recognized that it has been necessary to grant emergency relief to secure to the communities the service of the electric railways.

With commendable initiative and ofttimes against a hostile public sentiment, the regulating officers have granted temporary increases in the fares without undertaking to determine the value of the plants or make a long and exhaustive investigation. Very little, if any, criticism was made to us against State regulating commissions for their treatment of these utilities during the war period. The most serious difficulties were met with in communities where the charge was fixed by franchises, and the State authorities were without jurisdiction to regulate fares. During a war or other abnormal periods it would seem to be the duty of the State and municipal

officers to deal promptly with petitions for increased fares and to afford such relief as will enable the street railway to serve the public and maintain its track and equipment in proper operating condition. The public always pays for a run-down plant, either through inferior service or higher charges. The first essential is service to the public. Due recognition of this fact will secure to the investor a safe return upon his investment and to the public uninterrupted operation.

SECTION V.

CREDIT AND COOPERATION ARE THE COORDINATE NEEDS OF THE ELECTRIC RAILWAY.

It is clear from this record that the two serious needs in the electric railway situation to-day are its need of credit and its need of cooperation between the public and the utility.

Credit will enable the electric railways to rehabilitate themselves, to adjust their capital accounts, and to meet the prices of normal replacements which are now upon higher price levels. The cooperation of labor will enable them to render continuous and popular service, to effect operating economies, and to get into their treasuries the full amount of revenue collected from the riding public. First-class credit and the full cooperation of their employees, if properly utilized in rendering adequate public service, would give the electric railways a well-nigh impregnable position in their relations to the public and tend to disarm and overcome the prevailing antagonism against them. With capital and labor performing their respective parts freely and well, restrictive regulation would be unpopular, and the demand for the substitution of public ownership and operation for private management would shrink into relative insignificance. The test of private ownership and management lies in the solution of these two problems of credit and cooperation. These problems must be solved, and if no solution is practicable under present ownership and control, then the only course open is the complete transformation of the electric railway industry into a governmental business. Each member of this Commission believes that credit can be secured and private operation maintained under public supervision.

Unless the confidence of the investor in the securities of the companies furnishing this essential public service be restored the public itself must in some way assume the burden of supplying the funds necessary for their continuance. To a degree unknown to private business enterprises, which to a certain extent are able to finance capital expenditures from earnings, the electric railways are dependent upon new investment—new capital—for the extension, improvement, and betterment of the service which they perform. Communities need and are constantly demanding additional local transportation facilities. They require large sums of money, which can only come from those with savings to invest. When the flow of new capital ceases, when the confidence of the investor in the ability of the enterprise to safeguard the integrity of the investment and to insure a fair return thereon ceases, new capital is unobtainable and the utility can no longer serve the purpose for which it was created.

This condition is now present. Lack of confidence in electric railway investment exists to-day to a degree which has caused a

partial paralysis, is working havoc with the finances of the companies, and is depriving the public of the service to an alarming extent.

For rehabilitation and improvements and extensions which are vitally needed to meet the requirements of every growing community new capital at once and in large amounts is imperatively required, and until the force of circumstances convinces those with capital at their disposal that investment in electric railway securities affords safety and a fair return it can not be obtained.

So far as the requirements in normal times are concerned, certain characteristics of the electric railways and certain conditions under which they operate tend to make their credit almost unlimited. In the first place, they have enjoyed a monopoly of the most convenient form of local transportation during a period of rapid industrial development and of rapid increase in urban population. They have a continuous and immediate market for their "goods." They sell transportation as it is produced. While electric railway traffic fluctuates somewhat from year to year, according to the number of passengers and the prosperity that prevails, and fluctuates somewhat from season to season, from week to week, and from day to day, these fluctuations are relatively unimportant. The business of transportation goes on every day in the year. Under normal conditions the credit of the electric-railway business is its relatively small need for "fluid" or working capital. In this respect it occupies a position more independent than that of any other utility or any other private industry. It does a cash business. Almost 100 per cent of its revenues are collected in advance, through the sale of tickets or at the time the service is rendered, from the collection of fares in the cars. Money flows into its coffers day by day in a relatively even stream. Before it pays the wages of its employees, the salaries of its officers, the claims resulting from injuries and damages, the rentals for the use of property, the interest and dividends on its investment, or its taxes, it has already collected from its patrons in cash full compensation for the service rendered. It does not send out bills.

The increase in revenues of the electric railways is a product of three lines of expansion. These are the increase in urban population, the increase in the riding habit, and the increase in the rate of fare. The gross operating revenues of the electric railways grew from $247,000,000 in 1902 into $630,000,000 in 1917—an increase of 163 per cent. For a number of years, particularly during the first decade of the century, there was a strong tendency toward fare reductions in many urban communities, but the evidence shows that for the country at large the total amount of electric railway operating revenues increased by a much greater per cent than the number of revenue passengers during the 15 years ended with 1917. Since the latter date there has been a strong upward tendency in street railway fares. Statistics covering 75 per cent of the electric railway traffic of the country indicate an increase of nearly 14 per cent in the average fare paid from 1917 to 1919, and an increase of about 22 per cent in passenger earnings during this two-year period.

Without a doubt the enjoyment by the electric-railway industry of a steady inflow of revenue of rapidly increasing volume, assured by the most fundamental conditions of modern life and the strongly developed habits of the people, is extremely favorable to credit. In what other industry could investment be made with greater assurance

of security and continued earning power? The tracks for the most part are in the public streets where everybody can see them. The operation of the cars is most conspicuous. It would be hard to find another industry where the investment is completely visible to all and so freely observed by the entire population. If publicity of operation is a guaranty against the waste and disappearance of capital, then the position of the electric railway, where everybody can observe it every day, is surely conducive to the development and retention of credit. From this viewpoint how different is a street-railway investment from an investment in mining stock or in the fruit lands of the far West, or even in manufacturing enterprises in one's home city? The capital stock of electric railways does not require to be refunded, and under sound financial and regulating policies the proportion of stocks to bonds outstanding would undoubtedly be much greater than is shown to have been the case. Under such conditions refunding difficulties would be about negligible.

The record is not clear as to the amount of new money which may be required year by year, but a very conservative estimate places the figures at between $175,000,000 and $200,000,000 per annum, to be used in replacements, refunding obligations, extensions, and improvements.

For the purpose of restoring credit, it seems to be the general impression of all witnesses that the first necessity is for the industry to put into effect such economies of operation as will enable it to give good service at the lowest cost. Generally speaking, this can be done by the elimination of deadheads and other free service, the abandonment of nonprofitable lines, and, where practicable, the substitution of one-man cars for heavier equipment, the modification of special taxes or provisions for paving, snow removal, street closing, tolls, contributions toward the cost of public highways, bridges, etc., reduction of such rentals and power rates as may on investigation prove excessive, the cooperation with the public in developing faster schedules and installing skip stops at convenient places, rerouting of cars, the use of trailer cars, keeping street car tracks clear of traffic and other congestion, due to parking of motor cars on curbs, and the regulation of vehicular traffic. Much can also be done toward reduction in the cost of operation by developing the proper spirit of cooperation with employees. All of the matters herein suggested properly come under the head of good management and regulation and in some cases would entail legislation, but in our judgment they do not wholly solve the street car problem, or invite needed capital into the industry. During the past two years efforts have been made to meet the difficulty by increasing fares. In many cases this has helped to tide them over a difficult period, but it has not stimulated the confidence of the investor in the integrity of the industry. New capital is not flowing in that direction.

An effort has also been made in a number of communities to increase the short-haul riding habit as well as the revenues by the introduction of the zone system for fares. This system has proven generally successful in some of the European countries, but it has met with varying success in the United States. Fundamentally the theory of the zone system is logical. It is that a passenger pays for what he gets. Under the present flat fare charge, the short-haul rider is paying for a service given to the long-haul rider.

The original failure of the electric railways to vary their rates of fare for transportation service, based upon the length of the ride, as services in all other lines of business are sold, is, in our judgment, one of the contributing factors to their present financial condition. The electric-railway industry is the only public utility which, as an industry, has consistently adhered to a flat basis. Steam and suburban roads charge on a distance basis. Gas, power, electric, and water power companies, generally, make their rates upon a measured basis, subject to a minimum charge per month and the telephone company grade all toll messages on a mileage basis, while observing in most cases a flat rate per month for local service. Whether or not under present conditions it would be to the interest of a community to introduce a zone system of fares, instead of the present flat fare system, is a question which we think should be decided by the community itself, having reference to the social problems involved.

SECTION VI.

LABOR ON STREET RAILWAYS.

The labor policies of the electric street railways will in the future be of great importance as an element in the restoration and the permanent maintenance of their credit. The full cooperation of labor is essential to the highest prosperity and usefulness of the industry. This is particularly true because in the case of the street railways the employees who immediately handle the service come into direct contact with the people who consume that service.

The evidence before this Commission shows that in the past the suspension of service, due either to strikes or lockouts, has been costly to both the employees and to the operating company, but the loss occasioned to those two groups has been secondary to the damage wrought to the public interest. The conditions which recurrently bring about such interruptions of service should be treated at their roots. The employees engaged in this occupation should have a living wage and humane hours of labor and working conditions. They should have the right to deal collectively with their employers through committees or representatives of their own selection. In all contracts and working agreements made between them and the employing companies there should be arbitration provisions under which all labor disputes which can not be voluntarily settled shall be submitted to boards of arbitration composed of disinterested persons. The award of such a board of arbitration should be final and binding upon both parties to the controversy; for it is intolerable that the transportation service of a city should be subject to occasional paralysis, whether by strikes or by lockouts. It would seem that public authorities could well interest themselves in the formulation of such plans and rules for the arbitration of labor disputes under these contracts as will secure justice to both parties and as will assure continuity of service in so far as that may be possible of achievement.

But the full cooperation of labor in the street-railway industry will not have been brought about alone by the recognition of the right of collective bargaining which we have just been urging. Such recognition is but a foundation for full cooperation. The actual work of insuring it must come from the employees themselves to whom the

right of collective bargaining is thus given. For that right carries with it a duty. It would seem to be the duty of the organization which bargains for the individual worker to interest itself actively and unremittingly in his delivering to the company his best strength and intelligence.

This Commission thinks that where the street-railway worker has the right of collective bargaining the public has the right to expect that the organization or association representing him will not only procure his wage, but will also continuously stimulate his wholehearted constructive cooperation with the company and his effective service to the public.

SECTION VII.

VALUATION.

It is the law that utilities are entitled to a fair return upon the value of their property used in public service at the time of the inquiry. The methods for finding fair value are in dispute. No permanent solution of the electric railway question can be found in the absence of a finding of value for rate-making purposes. This applies to commission form of regulation, cost-of-service contracts, or public ownership and operation. The public should know what it is paying for, and this question can not be settled without knowing what the property is worth.

Although some evidence was introduced before this Commission on the subject of valuation, the Commission discouraged the introduction of testimony upon this question mainly because such testimony, no matter over how many weeks or months it might be extended, would have been but a fragmentary duplication of material already available in the official records of the Interstate Commerce Commission. Pursuant to an amendment of the Act to Regulate Commerce, approved March 1, 1913, which amendment is known as the Valuation Act, the Interstate Commerce Commission has during the past seven years been engaged in valuing the steam railroads, telegraph, and long-distance telephone companies in the United States. In connection with this work it has carried on a most extensive investigation into the subject of valuation for rate-making purposes, in the course of which investigation the carriers have been represented by a conference committee of 50, assisted by able lawyers, accountants, and engineers, while the public has been represented by the State public utility commissioners, their counsel, and by the General Counsel of the Interstate Commerce Commission. Every theory and principle of valuation has been fully and ably discussed, argued, and briefed.

On July 31, 1918, the Interstate Commerce Commission submitted its report in Valuation Docket No. 2, Texas Midland Railway. This report contains a full discussion of the different theories of valuation considered, the method employed by the Commission in assembling all the essential data, and discussion of the requirements of the Valuation Act, and the findings of the Commission upon most of the disputed questions. Subsequent decisions were made in the case of the Winston-Salem Southbound, Alabama, Birmingham & Atlantic, and Kansas City Southern Railroads. We are informed that decisions affecting many of the other railroads will be made during the present year.

The first requirement of the Valuation Act is for finding of original cost. The Commission is reporting original cost as fully as it possibly can be obtained from the best available evidence in each particular case. In its valuation proceedings it has been earnestly contended that the cost of reproduction new as of the date of inquiry should be taken to be the value of the property. Others have contended with equal earnestness that the value of the property should be limited to the original cost, as this item represents the money which has been actually invested by the stockholders and bondholders in the property. The rapid increase in the cost of labor, supplies, and material during and subsequent to the war period seems to have served as a peculiarly vivid indication that the original cost is a primary factor in finding value for rate-making purposes.

In our opinion, the decisions of the Interstate Commerce Commission, based upon long experience and investigation, will in large measure settle the standards of valuation. For this reason we suggest that municipalities and States which may be engaged, by arbitration or otherwise, in fixing the values of electric railways, should familiarize themselves with the practice, experience, and decisions of the Interstate Commerce Commission in these valuation cases.

The valuation, when once fixed as the basis for the financial return of the company, should logically come to affect the amount of capitalization. No matter what may be the plan of operation or of public regulation under which the company is working, if its financial credit is to be strengthened through just and stable arrangements with a friendly public, it should, in the judgment of this Commission, voluntarily reduce any excessive capitalization to conform to such valuation as may have been determined upon.

SECTION VIII.

PRESERVATION OF RECORDS.

We would particularly urge public officials and officers of the electric railways to cooperate seriously in the protection and preservation of all corporate, financial, and cost records.

Service-at-cost plans have been recently rejected by popular vote, largely on the issue of valuation, in Chicago, Denver, and Minneapolis. The public, justly or unjustly, has become so suspicious of the electric-railway companies that it may be expected to reject any service-at-cost or public ownership question submitted to popular vote, no matter how fairly the plan may be formulated, if it is not thoroughly convinced that the capital item has been fairly and honestly arrived at. The failure of a company to preserve its record may in the end hurt its stockholders more than it may the public.

SECTION IX.

AUTOMOBILE, JITNEY, AND MOTOR BUS.

The automobile and jitney bus are facts. Jitney competition began about 1912, and was at first entirely unregulated. Even today in some places it continues without regulation of any kind, and in many places with only partial and inefficient regulation. In no instance, so far as this record shows, has this so-called jitney carriage of passengers been subjected to obligations as to the payment

of taxes, maintenance of highways, character and extent of service, and financial responsibility for accidents under which the electric railway business is being conducted. The portion of the street paved and maintained by the electric railway, and in winter cleared of snow at its own expense, is taken advantage of by the jitney competitor without compensation either to the company or to the municipality, and often to the serious injury of the street railway by interfering with the prompt and regular movements of its cars. The jitneys prefer to confine themselves almost exclusively to the short-haul traffic. It appears that in the city of Bridgeport the jitneys carry about 50 per cent of the passengers riding within 1¼ miles of the center of the city; almost 69 per cent of the passengers riding between 1¼ and 2 miles from the center; a fraction less than 45 per cent of those riding between 2 and 2¾ miles from the center; and none riding more than 2¾ miles from the center of the city.

The question from the point of view of the street-railway service is, What, if anything, is to be done about them? The public, through its governmental agencies, would not concern itself with the effects of this competition if it were not that local transportation is recognized to be an essential public service. So far as private automobiles are concerned, although they undoubtedly have their effect upon the extent to which people make use of the street cars, they are even now less important than human legs as competitors of the electric railways, and it is not deemed to be consonant with the theory of American institutions and government that the free movement of private citizens by their own means of locomotion should be restricted in order to compel them to make use of public vehicles, whether the latter be operated by private agencies or directly by the Government. All that could be properly done in this direction would be to compel the private vehicle using the public highways to pay license fees or taxes proportionate to the burdens they place upon the highways, as compared with the burden placed upon the highways by the street cars.

While there is some diversity of opinion as to the permanency of the electric railway industry, in view of the improvements which are being made in the use of gasoline and electric power machines, the opinion appears to be nearly unanimous that the electric railway operating on tracks is the most efficient means of furnishing local transportation service in the urban centers. The future of the gasoline public conveyance in urban transportation is entirely unreckonable. Great strides have been made and greater strides will doubtless yet be made in its use. Local public authority would indeed be exercising a dangerous power in unduly restricting the use of new inventions for public transportation at a time when in nearly every large city the physical task, even for an electric railway well equipped, of carrying the public in decent comfort is becoming so formidable. If jitneys and automobile buses acting as common carriers were subject to regulation by State commissions and were required to procure a certificate of public convenience and necessity before establishing a route or undertaking to render public service, the motor vehicles would be prevented from entering into active competition with street car service unless the latter is shown to be wholly inadequate.

That street-railway service and jitney service can not permanently exist and pay their own way in competition with each other under

any ordinary urban conditions seems to be well established by experience and by the conditions inherent in local transportation service, but the belief is general that the motor bus may properly be used to supplement the service rendered by the street cars. The motor bus may be used to render a sort of supplementary service, such as the service now rendered on Fifth Avenue and certain other high-grade residential streets in New York City by the Fifth Avenue Coach Co., or the buses may be operated on other independent routes merely as feeders to the street railway system to take care of traffic in partially developed territory in advance of the time when street railway tracks can be laid with reasonable assurance that the investment will be self-sustaining.

Undoubtedly, the whole matter of the control or abolishment of jitney competition may be summed up in a few words. All transportation service is for the public. Jitneys and automobile buses can not be repressed merely for the sake of compelling people to ride on the street cars, particularly if the car fares are higher than the jitney fares and the car service less convenient than the jitney service. However, it is clearly in the public interest that all common carriers engaged in local transportation service should be required to render adequate and safe service, and that local transportation facilities should be developed in the most economical and effective way from the point of view of the community. Unnecessary and destructive competition ought not to be permitted, and the community at large should conserve the established facility that still is and promises to continue for an indefinite period the principal means of local transportation. The problem in a considerable measure is a local one, but in every case it should be solved with intelligent regard to the permanent interests and obligations of the community. If the street railways are to be allowed the benefits of even a qualified monopoly, they should be required to fulfill their obligations. They must render service that is adequate and convenient at rates that are attractive. The community can afford to go a long way to preserve street-railway service, and the efficient regulation of jitney and motor bus competition will aid considerably in restoring the confidence of investors in the future of the electric-railway industry and in increasing their gross and net revenues.

Section X.

DEPRECIATION.

The electric railways should adopt the policy of setting aside a depreciation fund with which to take care of replacements and thus preserve the integrity of their investment. It would have a very wholesome effect upon credit. Such has not been the practice in the past. Deferred maintenance has accumulated to an alarming extent during the war period.

Generally speaking, regulating commissions have the power to prescribe methods of accounting and to establish the amount of the depreciation fund. This practice should be observed, and its adoption will improve the situation of the industry and be greatly in the interest of the public welfare.

SECTION XI.

EXTENSIONS SHOULD BE PAID FOR BY ASSESSMENTS ON OUTLYING PROPERTY BENEFITED.

Your Commission would urge that in every community, where and to such extent as may be practicable, consideration be given to the advisability of requiring extensions and rapid transit systems of subway and elevated to be paid for, not out of new capital invested through the medium of bonds or stock, which means for all time an added burden upon the car rider, but from special taxes assessed against the owners of property in the district the value of which is enhanced by such extensions.

This would not be a new principle; it would be merely the application of an old principle. The American property owner has been accustomed to contributing out of the increase in value of his property to the cost of building streets and other public improvements. The principle is peculiarly applicable to improvements of city transportation systems, because of the enormous increases in real estate values created when new extensions open up new territory or when the creation of rapid-transit facilities make outlying territory more available.

The City Club of New York, in 1908, a few years after the extension of the New York subway from One hundred and thirty-fifth to Two hundred and thirtieth Streets, in Manhattan, had been built at a cost of $7,375,000, made an authoritative study of new real estate values created by that extension in the district lying between One hundred and thirty-fifth and Two hundred and thirtieth Streets. After deducting $20,000,000 as a liberal estimate, based upon studies of parallel situations, of the natural increase in property values in that district which would have taken place without the subway extension, it was found that the increase in values clearly brought about by the subway extensions was $49,200,000, an amount upward of seven times the cost of the improvements. The property in the district enjoyed an increase in value of 104 per cent. If, by assessment, it had borne the entire cost of the extension in the district, it would have still retained a new profit on the value of the land of 89 per cent, or an aggregate of $41,825,000 for the district. The Manhattan extension just referred to, together with The Bronx extension beyond One hundred and thirty-fifth Street, cost $13,075,000. These two extensions directly created, in a limited area lying near those extensions, new land values solely due to the extensions of $80,500,000. Let it be borne in mind that the cost of the entire subway system from the Battery to Two hundred and thirtieth Street in Manhattan and to Bronx Park was about $43,000,000.

In Philadelphia recent estimates of improvements in land values expected from rapid-transit projects in contemplation have been equally enlightening. Similar results would be certainly obtained in many other cities by studies similar to that made by the City Club of New York.

Is it not in accordance with the laws of economic justice, then, that the landowner, as such, should share his benefit of increased land value with the public? Instead of the cost, $7,375,000, of the Manhattan extension being borne by the owners of the land in the newly served territory, it was capitalized and translated into an annual charge of $350,000 or more, a burden which had to be borne out

of the car fares and which to-day helps to intensify the financial predicament in which the company finds itself. If the public pays out of its fares for the cost of maintaining and operating the line which will bring the outlying landowners such enrichment, should the latter not share with the public out of that enrichment, depending upon the degree in which he is benefited, by paying for or by helping to pay for the initial cost of construction of the line? That such a solution is just is rather significantly shown by the fact that in a number of cities landowners in outlying districts have offered spontaneously to contribute large sums to the company to assist it in constructing certain extensions. The present predicament of the street-railway companies is in many places partly due to overbuilding, a fault traceable to political or business pressures exerted by speculators in suburban lands who had little or no financial responsibility in connection with the street-railway extensions which they caused to be built for their immediate benefit. This action of the suburban landowners of certain cities, on the other hand, is a significant expression of enlightened self-interest and a sound, constructive recognition of a fundamental principle of justice. The establishment of that principle by law, whether by changes in city ordinances, State statutes, or State constitutions, should, in our opinion, not be delayed. This thought is especially recommended to the attention of a number of communities which are now facing the necessity of extensions or rapid-transit improvements.

Three points in this connection should be briefly touched upon:

First. The amount of the assessment on any owner would probably have to become fixed by an appraisal sometime after the construction of the improvement, and the owner should be given the option of paying his assessment in installments over a course of years. Consequently the actual first financing of the extension might have to be by the city.

Second. It will doubtless be urged by some that such a system for building extensions would lead to municipal ownership. On the contrary, it seems to us that if properly administered it could, by reducing the acuteness of the fare question, serve with much force to offset the pressure for municipal ownership.

Third. As to the problems incident to allowing a private company, for a nominal rent and in return for undertakings as to repair and maintenance, to take over or use public property, similar problems incident to similar arrangements have already been ably and effectively handled in Boston and a number of other cities under State or municipal regulation in connection with subways and other structures.

If objection to the employment of such principle in constructing extensions be made upon the ground that public officers and landowners along the line of the proposed extension are thus given the power to veto such extension, let it be remembered that the problem of extensions is not only a serious financial problem, but is also essentially and finally a long-range social problem. The development of a city's street railways should be guided primarily not by the fortuitous financial expediencies of a small group of bankers or real estate operators. It should be guided by the foresight and vision of those who are officially responsible for planning the city's growth and life, in terms of its water supply, its light, its streets, its sewers, its schools,

its parks, its playgrounds, its civic centers, its night amusements, its community life, its libraries, its hospitals. It should be guided by those whose public duty it is to be interested in the health and happiness of the average city toiler and his family of growing children.

The call for municipal ownership to-day does not all emanate from dissatisfaction with the service in a narrow sense as riding facilities. It is largely an expression of feeling on the part of many that the street railway, instead of helping to make conditions bearable, is contributing to making them unbearable; that it is not, with the functions and powers which it exercises, accomplishing what it might accomplish to reduce the abnormalities of city life. While areas within the city remain undeveloped and unserved by adequate transportation, toiling thousands find themselves dragged out miles farther, not to green lawns and spaces, but to a repetition of the same ugly congestion that they know in the city. The time will come when employers and educators will be forced to take cognizance of the impairment in working efficiency caused by such inconveniences as are suffered by the traveling public to-day. The time is approaching when cities will find it necessary to extend their street railways not on the basis of new property values or the earnings of any single line of rails, but on the basis, primarily, of what will be most consistent with the public health and public economy.

These motives are strongly at work underneath our situation to-day. The public's control over stock issues, service, routes, extensions, etc., is needed to-day not only in order that as part of a plan for restoring the credit of the street railways the community's interest may be protected by the guarantee of efficient management, but also because the city of to-day is taking a more conscious, constructive interest in the city of to-morrow. That interest can be recognized and cared for under private operation if the public authorities have the suggested controls. If such controls do not come into effective existence, then one of the strongest forces making for municipal ownership will continue to exert an increasing influence.

Your Commission trusts that this principle of paying wholly or in part for the construction of extensions out of special taxation of benefited property will be seriously studied and adopted where possible. It seems fundamentally sound. While its adoption presents legal difficulties, as has the adoption of many another newly recognized industrial-economic relation, it holds great promise for reducing the financial problems incident to public transportation.

Section XII.

RATE OF RETURN.

It is an axiom that property devoted to the public use should secure a fair rate of return. Where money is represented by bonds the return is a part of the contract and is not changed during the life of the contract. Where capital is represented by stock, the rate of return may vary according to the operating or financial conditions, and naturally it should compare favorably with the income upon other classes of investment. The undisputed testimony proves that the rate must be certain as well as reasonable to attract capital and that the absence of either of these essentials will frighten the investor away. It may be a lamentable fact, but it is nevertheless true, that

most of the electric railways are obliged to go to markets outside of their territory to secure new capital; and under existing circumstances the investor is no longer willing to place his money in speculative properties. The experience during the war period has taught investors that a fixed franchise fare fails to meet the requirements of the industry and there is no dissent from the suggestion that such a fixed fare is a relic of a bygone age. There are certain conspicuous examples of an adherence to a contract fare which may be referred to, but they do not affect our conclusion that the rate of fare must be subject to prompt revision according to the needs of the particular property.

Section XIII.

REGULATION OF PUBLIC UTILITIES.

The foundation stone of the relations between communities and the companies must be the local authority under which they are permitted to conduct business. Since practically in all States the local government alone has the power to permit the use of highways by electric railways, the primary authority is the franchise grant or agreement containing the permit. Franchises are of varying terms and conditions. Until recently the franchises were generally limited to a certain number of years, but now it seems to be the settled conviction that such contracts are inherently imperfect. A reserve fund set aside during the term to take care of the property at the expiration of the franchise would result in increased charges for services; and, upon the other hand, the failure to take care of the investment in this way leaves the company at the will and caprice of the public. Instances have been referred to in this record where the railways are having difficulty in securing new franchises, while in some communities there seems to be a disposition to take over the property for junk values. Under these conditions it is natural for the company to neglect maintenance and give poor service. From the evidence it appears that there will be difficulty hereafter in securing new capital for properties that are governed by such franchises.

The undisputed testimony favors an indeterminate franchise by which the company is permitted to operate subject to the right of the public to take over the property by paying its value or agreed price. Such contracts protect both the investment against confiscation and the public against extortion by providing for payment of just compensation for the use of the property. The indeterminate franchise has been most thoroughly developed in the State of Wisconsin, and it has been recognized in the District of Columbia, and the States of Indiana and Massachusetts. Its earlier adoption by other States and communities would have prevented many conflicts and misunderstandings. We believe that this form of franchise should receive the favorable consideration of the public.

Prior to 1907 the regulation of electric railways was principally confined to the municipalities. The history of this industry is replete with examples where municipal corruption has resulted from this control. The street railway is, however, essentially a local institution and it can not permanently prosper unless it has the confidence and cooperation of the public which it serves.

Since 1907 many States have taken over the control and regulation of this service and the communities within those States have been

deprived of all jurisdiction. While the evidence shows that exclusive State control is preferable to exclusive municipal control, yet there appears to be a happy middle ground by which the municipalities may exercise control of the things that are peculiarly within their province, and the State retain jurisdiction over all other matters and also exercise supervision over the action of the local tribunals. No general rule would fit all cases.

We have street railways which do not extend beyond the limits of a city, others where two or more systems operate in the same city, while frequently a single company operates in, through, and between a large number of cities and villages. In New Jersey one system serves practically the whole State, and the same condition exists in Connecticut. Manifestly no rule of thumb can apply to these different conditions. The tendency is to extend the mileage and service of street railways and to unite different companies under one management, and as our cities and villages grow and the rural country becomes more populous and prosperous these electric railways will extend their lines to meet the growing demands. Under such conditions safety, efficiency, and economy will be promoted by extending to a superior regulatory board the control of the practices, rules, regulations, security issues, the system of accounts, and the charges to be paid for the service.

Effective local control is well-nigh impossible where a single company spreads out over an entire section of the State and this condition even constitutes a serious obstacle to municipal ownership. Where the street railway company operates wholly within one city there can be no insuperable objection to exclusive municipal control, when the people are ready and willing to exercise it. Secretary Baker testified upon this point as follows:

> Because I think the responsibility for the management of its own affairs is the greatest educational influence that the city of Cleveland has. The fact that the people of the city had studied and grasped and solved an intricate and complicated problem like the street-railway problem has made them a more self-conscious and a stronger, more virile people than they were before that problem was put up to them; and I should be very sorry indeed to see the responsibility for their own affairs in as intimate and important matter as street-railway service taken away and transferred to a State agency.

Cleveland has made a more extensive study of the electric railway problem than any other city in the country. Intelligent regulation can not be secured without the assistance of expert operative, statistical, and engineering departments, and these are expensive items in any municipal budget.

In some respects uniformity is not only desirable but essential. This applies to the control of security issues, to accounting, the study and determination of depreciation and the control of such funds, fixing reasonable maintenance standards and their enforcement, and the methods and principles to be employed in valuing properties, either for rate making, capitalization, condemnation, or purchase. In a general way, the rules and principles which may be applied to the electric railway industry will be found available for other utilities, such as telephone, electric light, heating, power, and gas and water companies. In our judgment the State public service commissions should determine finally these matters, subject, of course, to an appeal to the courts where they err in judgment or transgress the law.

Regulation by municipalities should be subject to an appeal to the State public service commission, thus bringing to bear upon the question involved the judgment of a body of men somewhat aloof from local influences. This would place the final authority in the State, and surely the communities, which are but subdivisions of the State, should prefer to submit their cause to a State tribunal in preference to a court, which rarely, if ever, has any regulating experience.

Theoretically, State control is removed from the influence of community prejudices. It certainly exercises its functions with a more judicial attitude, and with greater equity to both the communities and the companies; probably it is in most instances more economical and more efficient, since the State can create a better and more comprehensive organization for regulation at less cost. State control obviates conflict of authority between communities that is bound to obtain when utilities operate beyond the limits of a single municipality. It makes unnecessary the erection of metropolitan or public utility districts in order to secure uniform regulation, and it also results in a large saving to single communities which would otherwise be obliged to maintain its expert departments to perform this service.

The possibility of combining the best features of State and local regulation through a division of powers and duties was suggested by several witnesses and has been carefully considered by this Commission. It would seem to be desirable to leave to the communities, at least in the first instance, the determination of such questions as the assignments of streets upon which the railways may operate, questions involving speed, stops, schedules, rerouting of cars, and service during peak hours and otherwise, the extension of tracks, rate of fare, and the securing of certain statistical information where such information does not directly interfere with the accounting rules which have been prescribed by the State. Under these conditions the cities would be compelled to take a direct interest in the transportation business, leading to a more wholesome cooperation between the public and the railways. We believe this principle is worth trying, because it places the initial regulating responsibility upon the community, thus leaving the way open for sympathetic understanding and cooperation between the public and the industry, without which the industry can not survive, and yet places the final responsibility upon the State, which is best equipped to determine the questions involved in a sane, consistent, and impartial manner.

In a number of States commissions now have complete authority over all questions. There should be no change if the people are satisfied with that policy. It has unquestionably worked well in most of these States. We do, however, desire to emphasize our belief that any form of regulation will fail of its purpose if it does not secure public cooperation in the conduct of the utility. Our study of conditions as they exist in the principal cities of the country has shown that unless the public is in sympathy with the purposes of the management and lends assistance in their achievement, neither efficient nor economical service is possible. Cooperation can not be obtained unless the public be informed as to all phases of the electric railway problem—financial, economical, and operating—and will not be continued unless the process and information is continued. This psychological factor involves a continuing task of undoubted magnitude, but whatever the regulatory authority may be, and however

great the difficulties, the duty involved must be performed if the relations of the public and these highly essential utilities are to be maintained upon a basis that will insure proper service.

The electric railway problems admit of a satisfactory solution once the elements that compose them are made known and the process of ordinary economic and business common sense are applied. The duty of both the public authorities and those who control the electric railway enterprises of the country is plainly indicated. The time has come for a permanent and satisfactory settlement of the traction question. The interests of both the public and the companies lie so exactly parallel in almost every respect that there ought not to be any serious difficulty in arriving at a solution if both parties approach the subject in a proper spirit.

SECTION XIV.

SERVICE-AT-COST PLANS.

The electric railways have responded to the improvements in the arts and sciences, and it may also be said that the science of regulation has fairly kept pace with the requirements of public service and the growth of the industry. Franchises have been the result of experiment. The contract fare established an unsound rate basis, and in some instances commissions were slow to reach conclusions in rate cases. Investors lost confidence in the electric-railway business. It was thought that a contract must be evolved which would meet all the requirements of the industry as well as of the public. Thus came the cost-of-service contract. It has worked well in Cleveland during the most difficult period in the history of the industry. It seems to have worked fairly well in the other cities where it has been tried out, and to justify the following statement made by Secretary Baker:

> I believe that any community in America will pay cheerfully and willingly whatever rate of fare is necessary to carry the people on their street railroads, and to maintain good service in their communities, if they are sure that they are paying only proper operating expenses, proper maintenance, and a proper return on capital.

Practically all of the witnesses for the electric-railway industry favored service-at-cost franchises. That service should be provided at cost is not a new principle in the regulation of public utilities. It is back of all public service commission regulation, and expresses the reaction from the original contractual relations between utilities and communities, under which fares were fixed and limited, while return was not. The application of the term "service at cost" in recent working agreements between the electric railways and the cities of Cleveland, Cincinnati, Dallas, Montreal, and to a limited extent the city of Boston, does not clearly describe such agreements. They are, in effect, devices for automatically and quickly adjusting price to cost. It is, therefore, not so much the principle back of such plans as it is the method provided for carrying that principle out that concerns the Commission in this phase of the traction problem. Without going into unnecessary detail, it will suffice to state that the main features of the contract are:

(*a*) Fair valuation of the property.
(*b*) Capitalization to conform thereto.
(*c*) Agreed return upon capital.

(*d*) Public control of capital issues, and, to a certain extent, over expenditures.

(*e*) Public supervision over management, operation, and service.

(*f*) Automatic changes of rates, to meet fluctuating economic conditions, and to insure a proper return on the value.

(*g*) Private operation, subject to the right of the municipality to purchase the property at its value, or upon an agreed price.

(*h*) Reduction of taxes and assessments.

The service-at-cost contract is still in its experimental stage, and naturally a number of criticisms have been made of it. These have been considered, but with the limited experience under this contract we believe that the criticisms are more theoretical than real. If these defects prove to be substantial and result in unduly increasing the cost of service, they can be removed by improved regulation, but if they can not finally be avoided, then it would seem that the public has ample protection in the contract's purchase provisions.

Generally speaking, the main criticism of this form of contract is that it tends toward inefficiency and uneconomic operation; that it contains no provision for the control of strikes, or uninterrupted service; and that labor and management may cooperatively increase the cost of operation to the point where the public may be unduly burdened.

From the point of view of credit restoration, the outstanding advantage of this contract is that rates are automatically adjusted to meet changing operating conditions. We are inclined to think that the assurance of an automatic adjustment of fare will do more than anything else to restore the confidence of the investor in these properties. Public confidence will be immeasurably strenghtened through the valuation of the properties, because the figure that is established constitutes the basis of the return to the investor, and fixes at least the minimum price which the public will be obliged to pay if, at some future time, it should decide to purchase and operate the property. When the value is thus fixed, there can be no further dispute as to capitalization or excessive profits, because the people will know just what they are paying for. The controlling element in its favor is the restoration of public confidence in the corporation, due to the removal of those elements of friction which have so frequently engaged the attention of the public. It might also be said that to a certain extent it removes the railways from the idea of speculative gain, and places them upon a common-sense business basis where the people pay for the service they get, and where the opportunity for large profits no longer exists, since economies and lower operating costs are reflected in reduced charges for service. When the contract is once established, the opportunity for municipal corruption is reduced to the minimum.

We strongly recommend the principles of the service-at-cost contract, not as the only solution, but as one means of solving a very difficult problem.

In cases where the electric railways operate in more than one municipality and between different municipalities, such service-at-cost contracts can properly, in our judgment, be made only with the public-service commission, and in such cases the provisions of the contract should apply in any particular community to the system as a whole rather than to its individual parts.

SECTION XV.

PUBLIC OWNERSHIP AND OPERATION.

It is urged by many that public regulation of the street railways has failed, and that the properties should be taken over by the municipalities or the State. Dr. Delos F. Wilcox concluded his able and interesting analysis of the testimony given in this connection with that suggestion. Some members of the Commission individually feel that eventually municipal ownership might prove generally desirable and that there may, perhaps, be communities in the United States in which on account of the responsibility of the local government and the acuteness of the present conditions, municipal ownership should be resorted to. The experience of Boston, San Francisco, and Seattle are being watched with great interest, but they have not continued long enough to justify any conclusion as to the relative merits of public as against private operation. The Commission is unanimous on this point: That there has not been sufficient experience with public ownership and operation of street railways in this country to enable us to recommend it as a permanent solution of this problem. In some of the foreign countries it has apparently worked well. We do not believe under present conditions that this method of operation would be successful in most of the cities of the United States to-day.

Aside from the serious question whether municipalities as at present organized can operate electric railways as efficiently and satisfactorily as private enterprises, our conviction upon this subject is based upon the great political difficulties which would have to be overcome, such as constitutional amendment, legislation and the fiscal burdens incident to the purchase by cities of great public utilities, and upon the further fact that in many sections of the country the lines of the railway extend through many cities and villages and into rural territory. It is assumed, however, that these latter difficulties could be mastered by a community thoroughly awakened to the necessity for such a change.

We are certain that much can be accomplished by private initiative, stimulated and aided by thorough public regulation; that the final solution could, in many communities, be found under private management, and that in any event, the reforms which have been urged by the Commission should be instituted, since those reforms would serve to place the relations between the street railway and the public upon a more just and equitable basis.

CONCLUSION.

We have conceived the scope of this inquiry to be to ascertain, first, the actual financial and service conditions of the electric railways of the United States at the present time; second, the causes which have contributed to such conditions; third, what readjustments of the relations between the electric railways and the communities which they serve must be brought about in order to restore the confidence of the public and to put the companies upon such a financial basis for the future as will enable them to render continuous and efficient service to their respective communities.

We have not entered into a minute discussion of the different franchise provisions throughout the country, nor have we under-

taken to suggest any details which should be incorporated into any new contract, but have preferred to confine ourselves to suggesting the broad outlines of such new relations.

The Commission is not pessimistic as to the future. The electric-railway problem admits of a satisfactory solution, once the elements that compose it are made known and the principles of ordinary economic and business common sense are applied.

The duty both of the public authorities and of those who control the electric-railway enterprises of the country is plainly indicated. The time has come for stable and satisfactory settlements of traction difficulties.

The Commission can go no further than to point out the principles upon which readjustment should be based. The task is really that of the State and local authorities upon the one hand, and of the companies upon the other. Failure to rehabilitate the industry and the service is possible only if those upon whom the responsibility rests fail to undertake the work or pursue it in a spirit that makes settlement impossible.

Respectfully submitted this 28th day of July, 1920.

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